

IN THE CLAIMS:

Please cancel Claims 7, 22 and 35 without prejudice or disclaimer of subject matter. Please amend Claims 1, 3, 16, 18, 28, 31 to 34 and 36, and add Claims 37 to 40 as shown below. The claims, as pending in the subject application, read as follows:

1. (Currently Amended) Apparatus for providing a user with an indication of the content of a text, the apparatus comprising:
  - receiving means for receiving text data[[:]];
  - topic determining means for determining from the text data at least one topic;
  - topic context data identifying means for identifying in the text data context data associated with the at least one topic determined by the topic determining means;
  - topic context data position determining means for determining, for each item of context data identified by the topic context data identifying means, the actual position of that item of context data within the text;
  - topic representation data providing means ~~arranged~~ operable to provide topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating visually to the user the relative ~~the~~ positions within the text data of the corresponding items of context data on the basis of the actual positions of the items of context data within the text as determined by the topic context data position determining means; and

supplying means for supplying the topic representation data for enabling display of the at least one topic representation to a user.

2. (Original) Apparatus according to claim 1, further comprising significance determining means for determining the relative significance of context data associated with the at least one topic, wherein the topic representation data providing means is arranged to provide a graphical representation that provides a visual indication of the relative significance of occurrence of the context data.

3. (Currently Amended) Apparatus for providing a user with an indication of the content of a text, the apparatus comprising:

a part-of-speech associater for associating words in text data with part-of-speech identifiers to produce part-of-speech identified text data;

a topic determiner for determining from the part-of-speech-identified text data at least one topic that occurs in the text data;

a topic context data identifier for identifying in the text data context data associated with the at least one topic determined by the topic determiner;

a topic context data position determiner for determining, for each item of context data identified by the topic context data identifier, the actual position of that item of context data within the text;

a topic representation data provider ~~arranged~~ operable to provide topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the

distribution of the visual indicia ~~represent~~ indicating visually to the user the relative positions within the text data of the corresponding items of context data on the basis of the actual positions of the items of context data within the text as determined by the topic context data position determining means; and

a display controller for causing a display to display the topic representation.

4. (Original) Apparatus according to claim 2, wherein the topic representation data providing means is arranged to provide topic representation data comprising data that determines the appearance of the visual indicia in accordance with the relative significance of the context data.

5. (Original) Apparatus according to claim 2, wherein the significance determining means is arranged to determine the significance of context data in accordance with at least one of frequency of occurrence in the text data, its position of occurrence in the text data and its appearance within the text data.

6. (Original) Apparatus according to claim 1, wherein the topic representation data providing means is arranged to provide topic representation data that defines the graphical representation as a line along which the visual indicia are distributed.

7. (Cancelled)

8. (Original) Apparatus according to claim 1, wherein the topic representation data providing means is arranged to provide topic representation data wherein the scale of distribution of the visual indicia is non-linear and is relatively enlarged in at least one of the following situations:

where the visual indicia are close together; and where the visual indicia are more significant.

9. (Original) Apparatus according to claim 1, further comprising:  
selection means for enabling a user to select a visual indicia; and  
highlighting means for causing any other visual indicia associated with the same context data as the selected visual indicia to be highlighted.

10. (Original) Apparatus according to claim 1, further comprising  
modifying means for modifying the visual indicia of a topic representation.

11. (Original) Apparatus according to claim 1, wherein:  
the topic determining means is arranged to determine a number of different topics from the text data;  
the topic context data identifying means is arranged to identify in the text data respective context data for each topic; and  
the topic representation data providing means is arranged to provide topic representation data defining a respective graphical representation for each topic.

12. (Original) Apparatus according to claim 1, wherein the topic determining means is arranged to determine from the text data at least one of the number of occurrences of the same lexical item and the number of occurrences of lexical items sharing a relationship and defining a lexical item set to identify the topic or topics in accordance with the highest such occurrences.

13. (Original) Apparatus according to claim 1, wherein the topic determining means is arranged to determine from the text data at least one of the number of occurrences of the same noun and the number of occurrences of nouns sharing a relationship and defining a noun set to identify the topic or topics in accordance with the highest such occurrences.

14. (Original) Apparatus according to claim 1, wherein the topic determining means is arranged to identify lexical chains in the phrase-identified text data and to identify as the topic or topics the lexical chain or chains having the highest number of components.

15. (Original) Apparatus according to claim 1, further comprising summarising means for generating a summary of the text and summary display means for causing the display to display the summary.

16. (Currently Amended) A method of providing a user with an

indication of the content of a text, the method comprising processor means carrying out the steps of:

receiving text data:

determining from the text data at least one topic;

identifying in the text data context data associated with the at least one determined topic;

determining, for each identified item of context data, the actual position of that item of context data within the text;

providing topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating visually to the user the relative the positions within the text data of the corresponding context data on the basis of the actual determined positions of the items of context data within the text; and

supplying the topic representation data for enabling the at least one topic representation to be displayed to a user.

17. (Original) A method according to claim 16, further comprising the processor means determining the relative significance of context data associated with the at least one topic and providing a graphical representation that provides a visual indication of the relative significance of occurrence of the context data.

18. (Currently Amended) A method of providing a user with an indication of the content of a text, the method comprising processor means carrying out the steps of:

associating words in text data with part-of-speech identifiers to produce part-of-speech identified text data;

determining from the part-of-speech-identified text data at least one topic that occurs in the text;

identifying in the text data context data associated with the at least one determined topic;

determining, for each identified item of context data, the actual position of that item of context data within the text;

providing topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating visually to the user ~~represent~~ the relative positions within the text data of the corresponding context data on the basis of the actual determined positions of the items of context data within the text; and causing a display to display the topic representation.

19. (Original) A method according to claim 17, wherein the topic representation data comprises data that determines the appearance of the visual indicia in accordance with the relative significance of the context data.

20. (Original) A method according to claim 17, wherein the significance

of context data is determined in accordance with at least one of frequency of occurrence in the text data, its position of occurrence in the text and its appearance within the text.

21. (Original) A method according to claim 16, wherein the topic representation data defines the graphical representation as a line along which the visual indicia are distributed with the relative positions of the visual indicia along the line representing the relative positions of the context of the context data in the text.

22. (Cancelled)

23. (Original) A method according to claim 16, wherein the topic representation data is provided so that the scale of distribution of the visual indicia is non-linear and is relatively enlarged in at least one of the following situations:

where the visual indicia are close together; and where the visual indicia are more significant.

24. (Original) A method according to claim 16, further comprising enabling a user to select a visual indicia and highlighting any other visual indicia associated with the same context data as the selected visual indicia.

25. (Original) A method according to claim 16, further comprising modifying the visual indicia of a topic representation in response to at least one of user input and the topic representation data.



26. (Original) A method according to claim 16, wherein:  
a number of different topics from the text data are determined;  
respective context data is identified in the text data for each topic; and  
the topic representation data is provided defining a respective graphical  
representation for each topic.

27. (Original) A method according to claim 16, further comprising the  
processor means determining from the text data at least one of the number of occurrences  
of the same lexical item and the number of occurrences of lexical items sharing a  
relationship and defining a lexical item set, to identify the topic or topics in accordance  
with the highest such occurrences.

28. (Currently Amended) ~~Apparatus~~ A method according to claim 16,  
further comprising the processor means determining from the text data at least one of the  
number of occurrences of the same noun and the number of occurrences of nouns sharing a  
relationship and defining a noun set, to identify the topic or topics in accordance with the  
highest such occurrences.

29. (Original) A method according to claim 16, which comprises the  
processor means identifying lexical chains in the phrase-identified text data and identifying  
as the topic or topics the lexical chain or chains having the highest number of components.

30. (Original) A method according to claim 16, further comprising

generating a summary of the text and causing the display to display the summary.

31. (Currently Amended) A user interface comprising:

topic representation display means arranged to display in a display area a graphical representation of a topic identified in text data, in which graphical representation are distributed visual indicia representing visually to the user the relative positions within the text data of items of context data associated with the identified topic on the basis of the actual positions of the items of context data within the text ~~context data associated with that topic and a cursor~~;

user input receiving means for receiving user input from a user input device and for moving the cursor in the display area in accordance with the user input; and

modifying means for modifying the graphical topic representation when the cursor is placed over a visual indicia.

32. (Currently Amended) A user interface comprising:

display means arranged to display a display region having first and second display areas adjacent to one another and configured to display in the first display area at least a portion of a text and to display in the second display area a graphical representation of a topic occurring in the text in which graphical representation are distributed visual indicia representing visually to the user context data associated with that topic such that the relative positions within the text data of items of context data associated with the topic are determined by the actual positions of the items of context data within the text, the display

means also being arranged to display a cursor in the display region and a scroll bar associated with the first display area;

user input means for receiving user input from a user input device and for moving the cursor in the display region in accordance with the user input; and

scrolling means for scrolling both the text in the first display area and the topic representation in the second display area when user input is received by the user input means that causes the cursor to move to input a scroll instruction.

33. (Currently Amended) Computer-executable program Program instructions stored on a computer-readable storage medium, the program instructions for programming processor means to carry out a method in accordance with claim 16 provide a user with an indication of the content of a text, the program instructions when executed by the processor means causing the processor means to:

determine from the text data at least one topic;

identify in the text data context data associated with the at least one determined topic;

determine, for each identified item of context data, the actual position of that item of context data within the text;

provide topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating visually to the user the relative positions within the text data of the corresponding context data on the basis of the actual determined positions of the items of context data within the text; and

supply the topic representation data for enabling the at least one topic representation to be displayed to a user.

34. (Currently Amended) A computer-readable storage medium storing computer-executable program instructions to program a processor to cause the processor to provide a user with an indication of the content of a text, the program instructions when executed by the processor causing the processor to:

determine from the text data at least one topic;

identify in the text data context data associated with the at least one determined topic;

determine, for each identified item of context data, the actual position of that item of context data within the text;

provide topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating visually to the user the relative positions within the text data of the corresponding context data on the basis of the actual determined positions of the items of context data within the text; and

supply the topic representation data for enabling the at least one topic representation to be displayed to a user

~~comprising program instructions in accordance with claim 33.~~

35. (Cancelled)

36. (Currently Amended) Apparatus for providing a user with an indication of the content of a text, the apparatus comprising:

- a receiver for receiving text data;
- a topic determiner for determining from the text data at least one topic;
- a topic context data identifier for identifying in the text data context data associated with the at least one topic determined by the topic determiner;
- a topic context data position determiner for determining, for each item of context data identified by the topic context data identifier, the actual position of that item of context data within the text;
- a topic representation data provider ~~arranged~~ operable to provide topic representation data defining a graphical representation of the at least one topic in which are distributed visual indicia representing at least some of the context data with the distribution of the visual indicia indicating visually to the user the relative ~~the~~ positions within the text data of the corresponding items of context data on the basis of the actual positions of the items of context data within the text as determined by the topic context data position determiner; and
- a supplier for supplying the topic representation data for enabling display of the at least one topic representation to a user.

37. (New) Apparatus according to claim 1, wherein the topic representation data providing means is arranged to provide the topic representation data so that there is a linear relationship between the relative positions of the visual indicia of the

graphical representation and the corresponding relative positions of the context data in the text data.

38. (New) Apparatus according to claim 1, wherein the topic context data position determining means is operable to determine the actual position of an item of context data within the text on the basis of the number of words from the start of the text to that item of context data.

39. (New) A method according to claim 16, wherein the topic representation data defines the graphical representation of the at least one topic so that there is a linear relationship between the relative positions of the visual indicia and the relative positions of the context data in the text.

40. (New) A method according to claim 16, wherein the actual position of an item of context data within the text is determined on the basis of the number of words from the start of the text to that item of context data.